Listing of Claims:

This listing of claims reflects all claim amendments and replaces all prior versions, and listings, of claims in the application. Material to be inserted is in **bold and underline**, and material to be deleted is in ~~strikeout~~ or (if the deletion is of five or fewer consecutive characters or would be difficult to see) in double brackets [[ ]].

In brief, claims 27, 29, and 30 have been canceled, without prejudice, and claims 5, 7, 19, 21, 28, 31-33, 35, and 37 have been amended.

1.–4. (Canceled)

5. (Currently Amended) A bone screw for compression of a bone, comprising:

a shank including a thread **disposed externally for threaded engagement with bone, the shank** [[and]] defining a long axis and a direction of advancement into bone; and

a head connected to the shank and defining a plurality of ledge structures disposed at spaced positions along the head, each ledge structure facing generally toward the direction of advancement and extending partially or completely around the head to define a respective plane disposed orthogonally to the long axis.

6. (Original) The bone screw of claim 5, wherein the shank has a proximal portion adjacent the head and a distal portion spaced from the head, and wherein the thread is restricted to the distal portion.

7. (Currently Amended) The bone screw of claim 5, wherein the ~~thread defines an opening so that the~~ bone screw is self-tapping.

8. (Original) The bone screw of claim 5, wherein the shank includes a tip region configured to cut a hole in the bone as the bone screw is advanced into the bone.

9. (Previously Presented) The bone screw of claim 5, wherein the ledge structures are formed by a plurality of ridges, a plurality of grooves, or both.

10. (Canceled)

11. (Previously Presented) The bone screw of claim 5, wherein one or more of the plurality of ledge structures extend in a closed loop corresponding to a circle.

12. (Canceled)

13. (Previously Presented) The bone screw of claim 5, wherein the plurality of ledge structures have a corresponding plurality of diameters, and wherein the diameters decrease successively toward the shank.

14. (Previously Presented) The bone screw of claim 5, wherein the head is shaped generally as a frustum of a cone.

15. (Previously Presented) The bone screw of claim 5, wherein the head includes a plurality of steps defined by stepwise decreases in the diameter of the head, and wherein the plurality of ledge structures are included in the plurality of steps.

16. (Canceled)

17. (Original) The bone screw of claim 5, wherein the shank and the head define opposing ends of the bone screw and further define an axial bore extending between the opposing ends.

18. (Original) The bone screw of claim 17, wherein the axial bore includes a widened region configured to receive a tool that engages the head.

19. (Currently Amended) The bone screw of claim 5, wherein the head **and the shank are both part of the same monolithic structure** ~~is fixedly connected to the shank~~.

20. (Original) The bone screw of claim 5, wherein the head is rotatably and/or slidably connected to the shank.

21. (Currently Amended) A bone screw for compression of a bone, comprising:

a shank including a proximal region, a distal region, and a thread **disposed externally for threaded engagement with bone and** restricted to the distal region; and

a head connected to the shank and spaced from the thread by the proximal region, the head ~~including a lateral surface~~ defining a plurality of spaced ledge structures disposed **along** [[on]] the head, each ledge structure **extending in a respective plane to describe** ~~describing~~ at least **an arc** ~~a portion~~ of a circle.

22. (Previously Presented) The bone screw of claim 21, wherein the ledge structures are defined by a plurality of ridges, a plurality of grooves, or both.

23. (Original) The bone screw of claim 21, wherein the ledge structures describe complete circles.

24. (Previously Presented) The bone screw of claim 21, wherein the head includes a plurality of steps defined by stepwise decreases in the diameter of the head, and wherein the plurality of ledge structures are included in the plurality of steps.

25. (Original) The bone screw of claim 21, wherein the head is generally frustoconical in shape.

26. (Previously Presented) The bone screw of claim 21, wherein the shank defines a long axis, wherein the head has a maximum diameter, wherein the head has an axial length that is measured parallel to the long axis, wherein the head has an aspect ratio defined by the axial length of the head relative to the maximum diameter of the head, and wherein the aspect ratio is at least 1:1.

27. (Canceled)

28. (Currently Amended) A method of compressing a bone with a bone screw, comprising:

forming a hole in the bone;

selecting a bone screw having a shank and a head **connected to the shank, the head defining a plurality of ledge structures disposed at spaced positions along the head, each ledge structure facing generally toward the direction of advancement and extending partially or completely around the head to define a respective plane disposed orthogonally to the long axis**; and

advancing first the shank and then the head of the bone screw into the hole **via threaded engagement of the shank with bone** ~~so that the head contacts and applies an axial force selectively to a plurality of spaced annular regions of the bone that each define a respective plane,~~ such that **a** portion[[s]] of the bone near the head **is** [[are]] compressed toward **a** portion[[s]] of the bone near the shank.

29. (Canceled)

30. (Canceled)

31. (Currently Amended) The method of claim 28, wherein the step of forming a hole includes **a step of** forming a bore and a counterbore, and wherein the step of advancing ~~the bone screw~~ disposes the head and the shank at least substantially in the counterbore and the bore, respectively.

32. (Currently Amended) The method of claim 28, wherein the step of forming a hole is performed by the step of advancing ~~a bone screw~~.

33. (Currently Amended) The method of claim 28, wherein the portion[[s]] of the bone near the head and the portion[[s]] of the bone near the shank are initially separated by a fracture in the bone.

34. (Previously Presented) The bone screw of claim 5, wherein one or more of the ledge structures slopes radially outward, generally toward the direction of advancement into bone.

35. (Currently Amended) A bone screw for compression of a bone, comprising:

a shank including a thread **disposed externally for threaded engagement with bone, the shank** [[and]] defining a long axis and a direction of advancement into bone; and

a head connected to the shank and including a plurality of spaced shoulders of different diameter, each shoulder facing generally in the direction of advancement and extending partially or completely around the long axis in a respective path defining a plane.

36. (Previously Presented) The bone screw of claim 35, wherein each shoulder follows a respective path defining a plane oriented orthogonally to the long axis.

37. (Currently Amended) The bone screw of claim 35, wherein each shoulder follows a respective path corresponding to **at least an arc** ~~one or more portions~~ of a circle ~~or a complete circle~~.

38. (Previously Presented) The bone screw of claim 35, wherein each shoulder extends completely around the long axis in a closed loop.

39. (Previously Presented) The bone screw of claim 35, wherein each shoulder slopes radially outward, generally toward the direction of advancement into bone.

40. (Previously Presented) The bone screw of claim 35, wherein the head includes at least one generally cylindrical segment disposed at least partially between a pair of the shoulders.